GENERALCARBIDE®
REDEFINING POSSIBLE™

GRADE DATA SHEET

GC-618CT

Microstructure

Composition	
Tungsten Carbide (6.0 micron)	78.0%
Cobalt	18.0%
Tantalum Carbide	3.0%
Other	1.0%

Physical Properties	
Hardness, HRA (ASTM B294)	86.5 - 87.5
Density, g/cc (ASTM B311)	13.51 - 13.65
Average Transverse Rupture Strength, psi (ASTM B406)	450,000
Typical Porosity (ASTM B276)	A02-B00-C00

PERFORMANCE CHARACTERISTICS

	LESS ■ ■ □ □ □ MORE
Wear Resistance	■ ■ □ □ □
Impact Resistance	■ ■ ■ ■ □
Galling Resistance	■ ■ ■ □ □
Corrosion Resistance	■ ■ ■ □ □

To ensure the highest metallurgical quality, General Carbide processes all grades in sinter-HIP furnaces.

Grade Attributes

This structure, containing coarse tungsten carbide particles, is coupled with a medium binder content to provide an impact resistant grade with simultaneous good resistance to fatigue failure. The tantalum carbide additive ensures high resistance to galling.

Typical Applications

> Metalforming Punches
> Dies
> Heading Die Inserts

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